

CLAIMS

1. A tool for aiding the removal of a fastening member from a structure to which it is attached by means of a threaded connection, the tool comprising: an elongate body member (30) having first and second ends, the first end having means (31) for deforming an end face of the fastening member to provide an area of purchase thereon; and means (44) to cause rotation of the fastening member to unscrew the fastening member from the structure.

2. A tool according to claim 1, wherein the fastening member comprises a nut or stud.

3. A tool according to claim 1 or 2, wherein said means to cause rotation comprises attachment means for the attachment of an operating member (44).

4. A tool according to claim 3, wherein the attachment means is located at the second end of the body member (30).

5. A tool according to claim 3 or 4, wherein the means to cause rotation, the attachment means or the operating member comprises an impact means (44) for both imparting a blow to the tool and providing the means for rotation.

6. A tool according to claim 5, wherein said impact means is an integral part of said tool.

7. A tool according to any of the preceding claims, wherein the means for deforming the fastening member comprises at least one cutting means (31') for biting into said end face.

8. A tool according to claim 7, wherein the cutting means includes an angled cutting edge.

5 9. A tool according to claim 7 or 8, wherein the cutting means comprises a blade ring (31) having blades arranged around an aperture formed in the blade ring.

10 10. A tool according to claim 8 wherein the cutting means comprises at least one blade (14) which is demountably attached to the elongate body.

15 11. A tool according to claim 10, wherein the tool includes means (20) for securing the blade (14) to the elongate body.

20 12. A tool according to any of claims 7 to 11, wherein the or each blade (14) is handed, so as to be orientatable in a first configuration for use with fastening members having a right handed threaded attachment, and to be orientatable in a second configuration for use with fastening members having a left handed threaded attachment.

25 13. A tool according to any of the preceding claims, wherein the first end of the body member is provided with an aperture running longitudinally through the centre of the body member.

30 14. A tool according to claim 13, wherein blades (14A, 14B) are provided on opposing sides of the aperture.

15. A tool according to claim 9 or 14, wherein the aperture enables a bolt or similar object, on which is threaded a

fastening member, to be lowered into the body member such that the blades (14, 31) come into contact with an end face of said fastening member.

5 16. A tool according to any of the preceding claims, wherein locating means (38) for locating the first end of the body member with respect to the end face of a fastening member are provided.

10 17. A tool according to claim 16, wherein the locating means (38) comprise centralising means.

15 18. A tool according to claim 17, wherein the locating means (38) comprises a mandrel for engagement with the end face of the fastening member.

19. A tool according to claim 18 or 19, wherein the leading end of the mandrel (38) is tapered.

20 20. A tool according to claim 18 or 19, wherein the mandrel (38) is spring mounted within the body member.

25 21. A tool according to any of the preceding claims, wherein the tool is provided with means (43) for preventing peripheral damage to the structure.

22. A tool according to claim 21, wherein a cover or shroud (43) is provided to surround the means for deforming the end face of the fastening member.

30 23. A method for facilitating the removal of a fastening member from a structure to which it is attached by means of a threaded connection, the method comprising:

deforming an exposed end face of the fastening member to provide an area of purchase thereon; and

5 rotating the fastening member using said area of purchase.

24. A method according to claim 23, wherein the method includes the preliminary step of locating a first end of a
10 tool according to any of claims 1 to 21 with respect to the end face of the fastening member.

25. A method according to claim 24, wherein the locating step comprises the use of a centralizing means for
15 centralizing the tool with respect to the end face of the fastening member.

26. A method according to claim 23, 24 or 25, wherein a region surrounding the fastening member is protected from
20 damage by shrouding that area.